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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,628	02/25/2004	William R. Ockert	3034.05US02	3102
24113	7590	12/11/2006	EXAMINER	
PATTERSON, THUENTE, SKAAR & CHRISTENSEN, P.A. 4800 IDS CENTER 80 SOUTH 8TH STREET MINNEAPOLIS, MN 55402-2100			DEBERADINIS, ROBERT L	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/786,628	OCKERT ET AL.	
	Examiner	Art Unit	
	Robert DeBerardinis	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 09 August 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-22 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 07 June 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/9/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,9,11,12,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over GRIESS 4,156,280 in view of HOOPES 6,816,350.

Claims 1,2,4,9,11,13.

GRIESS discloses sampling a primary voltage source (power line) at regular time intervals thereby generating a series of voltage readings (col. 2, lines 1,2); comparing the voltage readings to an under voltage trigger threshold; detecting an under voltage condition; storing a plurality of voltage readings; initializing a restore response after the voltage level rises above a restore value.

GRIESS does not disclose initializing an under voltage in response cycle that controls the electrical load when voltage readings are less than or equal to the under voltage trigger threshold for a predefined under voltage period; storing a plurality of load restore counter values in memory before disengaging the load.

HOOPES discloses AC voltage protection circuit wherein the power lines are disconnected from the load thereby preventing damage that an under-voltage condition can cause (col. 3, lines 19-31).

It would have been obvious to one having ordinary skill in the art at the time of this invention to have modified the utility monitor for detecting and storing power line disturbances method to include the ac protection circuit method to disconnect the power lines from the load and to merely set the threshold levels to disconnect the load at the right levels of voltage to prevent the load from being damaged.

Claim 3

It would have been obvious to one having ordinary skill in the art to merely set a threshold having a hysteresis level to prevent the protection circuit from oscillating the connecting and disconnecting of the load when the voltage level is marginally low.

Claim 12.

GRIESS further discloses a bridge rectifier (10) and it is obvious that a level shifter would be used when circuit outputs that are not logic levels that need to interface with the microprocessor would require a level shifter to translate the circuit output to a logic level to interface with the microprocessor logic level.

Claims 8,15-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over GRIESS 4,156,280 in view of HOOPES 6,816,350 in further view of HODGE et al. 6,314,378.

GRIESS in view of HOOPES disclose the method of claim 1.

GRIESS in view of HOOPES does not disclose the method further comprising the step of detecting an under frequency condition and initializing the line under frequency response.

HODGE et al. a method of increasing the system stability of an electricity supply network including the steps of locating programmable frequency sensitive relays at load shedding points within the network (abstract).

It would have been obvious to one having ordinary skill in the art at the time of this invention to have modified the above method to include the programmable steps in the utility monitoring method to monitor the network frequency and to shed the critical loads from the network to prevent the loads that are sensitive to frequency from being damaged.

Claims 10,14.

HODGE et al. discloses power line carrier links adapted to transmit disengage commands to the electrical load that is connected to the storage means (col. 3 line 9).

Claims 5,6,7 are rejected under 35 U.S.C. 103(a) as being unpatentable over GRIESS 4,156,280 in view of HOOPES 6,816,350 in further view of DOUGHERTY 6,356,426.

Claims 5,6,7.

GRIESS in view of HOOPES disclose the method of claim 1.

GRIESS in view of HOOPES does not disclose the step of starting a cold load pickup.

DOUGHERTY discloses the step of starting a cold load pickup (col. 1, lines 44-67, col. 2, lines 1-31).

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It would have been obvious to one having ordinary skill in the art at the time of this invention to have merely modified the utility monitoring method to include the step of communicating with remote controlled circuit breakers to stagger the return of power to the loads to reduce the stress on the system during the cold load pickup.

Any inquiry concerning this communication should be directed to Robert L. DeBerardinis whose number is (571) 272-2049. The Examiner can normally be reached Monday-Friday from 8:30 am to 5:00 pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Brian Sircus, can be reached on (571) 272-2058. The Fax phone number for this Group is (703) 872-9306.

RLD

NOVEMBER 29, 2006



ROBERT L. DEBERARDINIS
PRIMARY EXAMINER